दूरभाषि : TELEPHONE : तार : बार्क--मुंबई, चेम्बुर. TELEGRAMS: BARC-MUMBAI, CHEMBUR. टेलेक्स : ०११-६१०१७/०११-६१०२२ बार्क ईन TELEX: 011-61017/011-61022 BARC IN फेक्स संख्या : <u>११ - 22 - 550 5151</u> FAX NUMBER: 91-22-5505151



ट्रॉम्बे, मुंबई-४०० ०८५. TROMBAY, MUMBAI-400 085.

भारत सरकार GOVERNMENT OF INDIA भाभा परमाणु अनुसंधान केन्द्र BHABHA ATOMIC RESEARCH CENTRE RESEARCH REACTOR MAINTENANCE DIVISION Mechanical Maintenance Section. Dhruva

Ref: RRMD/ TN- 04 /2022

March 28, 2022

Sub: In-situ chemical cleaning of cooling coils of ATP, Dhruva

Sir,

Sealed quotation is invited, for and on behalf of the President of India, for the above job as per the description and scope of work given below.

1.1 Tender offer is to be submitted in two parts viz. Part-A (Techno- commercial Bid) and Part-B (Price Bid).

In **Part-A** (Technical Bid) bidder must attach following documents;

- a) Latest PAN No, GST Certificate / Number.
- b) List of available machinery.
- c) Proof of having satisfactorily completed similar chemical cleaning works.
- d) Procedure used for such chemical cleaning works.

In **Part-B** (Price Bid) the quotation shall be in the format of attached schedule-B and shall show the basic cost and GST separately, if applicable.

1.2 Tenders are required to be submitted in separate sealed envelopes, containing and indicating the following on outside:

First Envelope Tender no.		Part-A (Technical Bid)		
Second Envelope	Tender no.	Part-B (Price Bid)		

The technical bid and the financial bid should be sealed by the bidder in separate covers duly super scribed and both these sealed covers are to be put in a bigger cover which should be sealed and duly super scribed with the name of the work, name and address of bidder, tender notice no. and due date.

1.3 Sealed and super scribed Tenders as mentioned above in 1.2 shall be sent to and will be received up to 16.00 hrs. of 7th April, 2022 in the office of AO III, Reactor Group, Dhruva, BARC, Trombay, Mumbai-400085. The quotation shall be sent through registered post/speed post through Indian postal services only. Quotation delivered by person or through courier will not be accepted and not considered for bidding process.

- 1.4 <u>Bidder Qualification</u>: After opening of Part-A of the tender, bidders shall be evaluated, for their techno-commercial capability to carry out the work based on;
 - a) Technical capabilities in regard to tendered work
 - b) Available resources, skilled man power.
 - c) Quality and safety consciousness.
 - d) Adherence to time schedule for the completed works.

The bidder shall also submit the documentary evidence of execution of similar work of similar cost preferably in DAE units or other government/PSU sectors. Those who do not satisfy the conditions shall not be considered. Part-B (Price Bid) of tender will be opened at a later date only for the successful bidders who are qualified through technical evaluation.

1.5 The acceptance of tender will rest with Director, Reactor Group, BARC on behalf of President of India who does not bind himself to accept the lowest tender and reserves to himself the authority to reject any or all of the tenders received, without assignment of any reason.

Sr.	Description	Dehumidifying chilled water	
No.		cooling coil	
2	Air entry dry bulb temperature	Ambient prevailing in Mumbai	
3	Air Entry Relative Humidity %	Ambient prevailing in Mumbai	
4	Outlet air dry bulb temperature	11.6 ⁰ C	
5	Outlet air Relative Humidity %	97 %	
6	Nos. of coils	6	
7	Arrangement	2 rows x 3 column	
8	Coil size	10 row deep, 750 W x 450 D x 1500 H	
9	Tube OD in mm	16	
10	Tube thickness	18 or 20G	
11	Tube material	Copper	
12	Fin material & thickness	Al (34G)	
13	No. of fin/inch	12	
14	Pressure drop across coil air side (mm of WC)	24	
15	Pressure drop across coil water side (mm of WC)	6.4	
16	Chilled water temperature (I/L & O/L)	7.8°C / 12.2°C	
17	Flow of water through each coil in lps	10.3	
18	Cooling capacity	55 TR/coil (330 TR for 6	
		coils)	
19	Air flow	62,900 m ³ /hr (Total for 6	
		coils)	
20	Size of each coil	1524 H x 762 W x 450 T mm	
21	Header size & material	4" NB & Copper	
22	Coil test pressure	300 psig.	

2.1 Description & design parameters of the dehumidifying chilled water cooling coil:

Due to dust and corrosion products, the coil surface has got choked and the differential pressure across coil has increased. To improve the performance of the coil, it is required to clean the coils with water jet as well as suitable chemicals, without damaging the parent material. Proven chemicals compatible with the material of coils and fins only shall be used.

2.2 **Scope of job.**

A tentative procedure is given below. If contractor is having different procedure, it shall be got approved by Department before commencing the job. The work shall be done only after finalizing and approving the procedure.

- 2.2.1 Providing electrically or pneumatically operated deep cleaning jet pump / machine suitable for the above said coils, with sufficient spares, at site.
- 2.2.2 Supply of sufficient quantity of suitable chemical cleaners which are eco friendly, bio degradable, metal safe & non toxic to human beings for above coil cleaning work. Chemicals will be first tested by BARC to ensure that they are compatible and will not corrode the materials of coils and fins. Usage of chemicals shall be permitted only after approval of our labs.
- 2.2.3 Water jet flushing of each coil (6 nos.) from both sides by jet pump.
- 2.2.4 Apply/spray chemical cleaner over the coils so as to soak the full tube surfaces and leave for sufficient time for soaking.
- 2.2.5 Flush the chemical and debris out by thorough water flushing by hydro jet.
- 2.2.6 Cleaning by degreasing chemical to remove oil based contaminations followed by intense water cleaning.
- 2.2.7 Repeat entire above said process till cleaning is satisfactory.
- 2.2.8 After final plain water cleaning, quality of water coming out from coil shall be chemically analysed for any traces of chemicals used in the process. Flushing shall be done till no traces are seen.
- 2.2.9 Apply water based protective coating on both side of restored coil and side copper headers so that it will adheres to the surface & does not affect heat transfer.

Acceptance test at our end

2.2.10 After completion of the job, the pressure drop across the de-humidifying coil will be measure after starting ventilation system & should be less than 60 mm of WC. The work on cooling coil will be deemed to have been completed in all respects after satisfaction of the Engineer-In-Charge (EIC) for the job.

3.0 Terms and conditions.

- 3.1 The contractor shall make arrangements for all the necessary Tools, tackles, equipments, consumables etc., required for the job.
- 3.2 The contractor may propose alternate cleaning process & tools etc. required for such process shall be arranged by him at his own expenses but with prior permission of BARC.
- 3.3 The contractor shall be ready & prepared to start the work within two week's time after the receipt of confirmed work order and the exact date will be intimated in advance.
- 3.4 All the Personnel brought for the work shall have valid Police Verification Certificates.
- 3.5 The contractor shall visit the site and familiarize himself with the quantum of work.

- 3.6 All the workers arranged by the contractor shall be physically and mentally fit. All the Industrial Safety standards shall be followed and all safety gadgets as per safety engineer shall be arranged by the contractor. Department shall not be responsible for any untoward incident during the work.
- 3.7 GSTN and PAN shall be indicated in the quotation.
- 3.8 The prices quoted by the vendor shall be valid for at least 90 days from the date of opening of the tender.

4.0 Scope of department:

- 4.1 Necessary power / compressed air supply arrangement shall be provided.
- 4.2 Municipal water at 3 to 4 Kgf/ cm^2 will be provided at the location.

5.0 Commercial Terms and conditions.

- 5.1 HSN codes of each item shall be specifically mentioned (if applicable). The quotation shall be inclusive of all the charges including the transportation, mobilization and relevant taxes.
- 5.2 The vendor shall quote clearly with item wise break-up in enclosed Schedule B format. Any taxes, duties, levies etc. is to be quoted separately.
- 5.3 GST registration number and PAN number shall be indicated in the quotation. Quotations without these numbers shall be rejected.
- 5.4 The prices quoted by the vendor shall be valid for at least three months from the date of opening of the tender.
- 5.5 Transportation and safe delivery of all the components to BARC shall be done by the vendor at his own expense.
- 5.6 As per notification issued by the Ministry of Finance, Department of Revenue of Government of India, the goods (other than services) specified herein are exempted from GST to certain extent to including Department of Atomic Energy. Interstate transaction for R&D will attract IGST @ 5% only as per notification No. 47/17-Integrated Tax (Rate) dated 14.11.2017. Transaction within the state will attract Central Goods and Service Tax (CGST) @ 2.5% and State Goods Service Tax (SGST) @2.5% as per notification no. 45/2017- dt. 14.11.2017. This limits the total GST component to 5%. A GST exemption certificate approved by Competent Authority will be issued to the firm before dispatch of the items. Hence this limit may be considered while submitting the quotation.

6.0 <u>Payment:</u>

- **6.1** No advance or part payment is admissible. The full and final payment will be made within 45 days after completion of the job in all respects.
- 6.2 Income tax @ 2% & GST TDS @ 2% will be deducted from the payment amount.
- **6.3** The attached 206AB declaration format along with supporting documents shall be submitted. Otherwise double TDS will be deducted as per IT clause 206AB.
- 6.4 For payment the following shall be provided
 - **a**) Original Bill in duplicate
 - **b**) Taxes need to be shown separately in the bill.
 - c) Advance stamped receipt.
 - d) GST registration number, PAN number to be indicated in the stamped invoice.
 - e) The attached GST undertaking shall be filled and submitted.

- **6.5** Payment will be made **only** through ECS/Core Banking System. Hence, please furnish the bank details such as Bank's name & address, A/c No. and IFSC code in the invoice
- **6.6** BARC is the final consumer of the goods/services procured and does not intend to make any outward supply. BARC will not avail the benefits of Input Tax Credit and hence, the goods can be supplied without quoting the GSTIN of BARC, Mumbai on the invoice. The invoices taxed under GST, as per rates applicable under the GST Schedule of Rates, shall be admitted for payment

7.0 <u>Work Completion Schedule</u>

- 7.1 The job shall be completed within Three months from the receipt of acceptance of the work order by you.
- **7.2** Time is the essence of the contract. If you fail to comply with this condition you shall be liable to pay compensation.
- **7.3** Penalty clause: Any delay in the completion of the job which is attributable to the vendor, is liable for a penalty @ ½ % of the work-order value per week (max. 5%).
- **7.4** In case extension in the job completion period is required, the vendor has to write to BARC & it should be approved.
- **7.5** While the contract is intended to be valid for a period of three months, the department reserves the right to terminate this contract by giving a notice of one month and without any financial obligation on the part of department. In the event of cancellation of the contract for a reason or the other the payment for service carried out will be paid on prorata basis.
- **7.6** Proportionate amount shall be deducted from charges for non-compliance of work.

8. <u>CONFIDENTIALITY CLAUSES.</u>

8.1 <u>Confidentiality</u>:

No party shall disclose any information to any third party concerning the matters under this contract generally. In particular, any information identified as **"Proprietory"** in nature by the disclosing party shall be kept strictly confidential by the receiving party and shall not be disclosed to any third party without the prior written consent of the original disclosing party.

This clause shall apply to the sub-contractors, consultants, advisers or the employees engaged by a party with equal force.

8.2 "<u>Restricted information</u>" categories under section 18 of the Atomic Energy Act, <u>1962 and "Official Secrets" under Section 5 of the Official Secrets Act, 1923</u>:

Any contravention of the above mentioned provisions by any contractor, subcontractor, consultant, adviser or the employees of a contractor will invite penal consequences under the aforesaid legislation.

8.3 <u>Prohibition against use of BARC's name without permission for publicity</u> <u>purposes</u>:

The contractor or sub-contractor, consultant, adviser or the employees engaged by the contractor shall not use BARC's name for any publicity purpose through any public media like Press, Radio, T.V. or Internet without the prior written approval of BARC.

9. <u>SECURITY INSTRUCTIONS</u>

Please indicate whether any of your relatives are employed in BARC or you or any of your employees were employed in BARC or any other units of DAE.

10. <u>General:</u>

- 10.1 The acceptance of the tenders/quotations will rest with Director, RG who does not bind himself to accept the lowest offer, and reserves to him the authority to reject any or all the tenders received without assigning any reason.
- 10.2 The quotation shall be inclusive of all the charges including the transportation, mobilization, testing etc.
- 10.3 Quotation received after the due date and time shall be summarily rejected.
- 10.4 You may contact Shri S. K. Tripathi, TO/D, at Telephone No. 25594260, E-mail: santosht@barc.gov.in, for further clarifications.

Encl: i) Format for Quotation

- ii) Annexure-II
- iii) 206 AB declaration

-S/d-

(K. Ramavarma) EIC (Mechanical) For & On behalf of President of India Tel: 022-25594622

Annexure-1

Format of quotation/Schedule- B

Name of work: In-situ chemical cleaning of cooling coils of ATP, Dhruva.

S1.	Description	Unit	Quantity	Cost/unit	Amount		
No.			(a)	i.e. Rate (b)	(Rs)		
			(a)		$c = a \ge b$		
1	In-situ chemical cleaning of 6 nos.						
	of 10 row deep cooling coils (size	Lump	1				
	of each coil : 1524 H x 762 W x	sum					
	450 T mm) arranged in two rows						
	& 3 columns of ATP, Dhruva as						
	per tender specifications.						
Sub to	Sub total						
GST	GST @ %						
Total	Total (Rupees						

(Signature of Contractor with rubber Stamp)

Annexure-II

UNDERTAKING

(Goods & Service Tax)

The following certificates should be submitted by the suppliers / contractors to the paying authority on the bill itself when Goods & service Tax (GST) is claimed as extra by the contractors / suppliers.

- 1. **Certified that** the Goods and packing on which Goods & Service Tax (GST) has been charged, have not been exempted under the Goods & Service (GST) or the rules made there under.
- 2. **Certified further that** we have actually paid Goods & Service Tax (GST) and are being assessed to Goods & Service Tax (GST) and also that where there are statutory exemptions under the GST act concerned we have availed of the same and certify non availability of such provision for Goods & Service Tax (GST).
- 3. **Certify that** in respect of the amount claimed in the bill, no claim is pending for refund / or is admissible. Certify that in the event of our getting refund in whole or in part of the element of Goods & Service Tax (GST), we shall pass on the benefit of the amount of refund obtained by us.

Certified	further	that	we	(our	branch	of	agent)
(Address)							
are registere	d as dealer ir	the State	of				under the
Central Reg	istration No.						for
the purpose of	of Goods & Se	ervice Tax	(GST).				

(Signature with rubber Stamp)

206AB Declaration

To whomsoever it may concern

Undertaking pursuant to Section 206AB of the Income Tax Act, 1961 Declaration confirming filing of Income Tax Return for immediate two preceding years(Section 206AB of Income Tax Act)

I, [], in the capacity of Individual/ Proprietor/ Partner/ Director/Authorized signatory of [Entity Name] PAN No , do hereby make the following declaration as required under the relevant provisions of the Income Act, 1961 (hereinafter referred as 'the Act'):

1. That I/We am/are authorized to make this declaration in the capacity as Individual/ Proprietor/Partner/Director.

2. I/We hereby declare and confirm that I/We do not fall under the definition of 'specified person' as provided in section 206AB of the IT Act.

3. I / We have duly filed return of income for FY 18-19 & FY 19-20 within due date as per Section 139(1) of the Income-tax Act, 1961 -Yes/No

4. If return has been filed the details are as follows:

I/We, [], having PAN No , do hereby confirm that the provision of section 206 AB is not applicable in my/our case as I/We am/are regular in filing of Income Tax Return. The details alongwith proof of documents of acknowledgement numbers and date of filing of income tax returns for last two financial years are furnished below:

Sr no.	Financial year (Assessment year)	Date of Filing IT return	ITR Acknowledgement No.

5. I/We hereby take responsibility for any loss/liability fully including any Tax, interest, penalty, etc. that may arise due to incorrect reporting of above information

All the aforesaid representations are true and correct, and we/I agree to furnish any evidence required by [] at any time in support thereof.

On behalf of _____

Name of the authorised signatory& Designation:

Name of entity

Seal Date